

Post-doctoral Fellow in Pluripotent Stem Cells and Joint Tissue Development Craft Laboratory

The Craft lab is looking for an outstanding, highly motivated postdoctoral fellow to join our developmental biology and pluripotent stem cell-based team in the Department of Orthopaedic Surgery at Boston Children's Hospital and Harvard Medical School.

We established directed differentiation protocols to generate distinct articular and growth plate-like cartilage lineages from human and mouse pluripotent stem cells (Craft et al., *Development* 2013; Craft et al., *Nature Biotech* 2015). Ongoing projects in our lab include investigating mechanisms of articular chondrocyte lineage commitment and stability of this fate through deep sequencing and functional assays, specification and characterization of joint progenitor cells using newly generated fluorescent reporter lines, translational/preclinical experiments of cartilage repair in large animals, and developing iPSC models of congenital cartilage disease. Collaborative projects with Harvard faculty include studies of how modifications in regulatory elements of *GDF5* impact gene expression and differentiation of joint lineages (with Dr. Terence Capellini, Harvard University), and evaluating the cartilage and tendon-inducing functions of small molecules and their associated signaling pathways (identified by Dr. Jenna Galloway, Massachusetts General Hospital, through zebrafish screens) in embryonic stem cell differentiation cultures.

Members of the Craft lab participate in seminar series and other events within the Harvard Stem Cell Institute, the Center for Skeletal Research, Boston Children's Hospital Orthopaedic Research Laboratories, and Harvard Medical School.

Requirements

The successful candidate will have received a PhD or MD/PhD within the past 2 years, a minimum of 3 years laboratory experience including tissue culture, at least one first author publication, and excellent communication skills in English. Individuals with experience in one or more of the following are encouraged to apply: limb/joint/cartilage or early embryonic development, signal transduction pathways, ESC/iPSCs, single cell RNAseq/programming.

Apply

Interested applicants should email their CV and contact information for three references to Dr. April Craft at april.craft@childrens.harvard.edu